

UNITED STATE EPARTMENT OF COMMERCE United States Patent and Trademark Office

Address: COMMISSIONER OF PATENTS AND TRADEMARKS

Washington, D.C. 20231

APPLICATION NO. FILING DATE FIRST NAMED INVENTOR ATTORNEY DOCKET NO. \Box 02/25/00 HARRIS 15280-376100 09/513,365 **EXAMINER** Г HM22/0910 Townsend and Townsend and Crew LLP NICKOL, G Two Embarcadero Center 8th Floor **ART UNIT** PAPER NUMBER San Francisco CA 94111-3834 1642 **DATE MAILED:** 09/10/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

		Application No).	Applicant(s)		
Office Action Summary		09/513,365		HARRIS ET AL.		
		Examiner		Art Unit		
		Gary B. Nickol	Ph.D.	1642		
	- The MAILING DATE of this communication app	pears on the cov	er sheet with the c	orrespondence ad	ldress	
Period fo	• •		ODE AMONTH	0) 50014		
THE N - Exten after S - If the - If NO - Failur - Any re	DRTENED STATUTORY PERIOD FOR REPLY MAILING DATE OF THIS COMMUNICATION. sions of time may be available under the provisions of 37 CFR 1.1: SIX (6) MONTHS from the mailing date of this communication. period for reply specified above is less than thirty (30) days, a reply period for reply is specified above, the maximum statutory period ve to reply within the set or extended period for reply will, by statute the sply received by the Office later than three months after the mailing dipatent term adjustment. See 37 CFR 1.704(b).	36(a). In no event, ho y within the statutory n will apply and will expire, cause the application	wever, may a reply be tin tinimum of thirty (30) day e SIX (6) MONTHS from to become ABANDONE	nely filed s will be considered time the mailing date of this o D (35 U.S.C. § 133).	y. ommunication.	
1)⊠	Responsive to communication(s) filed on 09 h	May 2001 .				
2a)□	This action is FINAL . 2b)⊠ Th	is action is non-	final.			
3)	Since this application is in condition for allowardsed in accordance with the practice under				ne merits is	
Dispositi	on of Claims					
4)⊠	Claim(s) <u>1-57</u> is/are pending in the application	١.				
4	4a) Of the above claim(s) is/are withdraw	wn from conside	eration.			
5)[Claim(s) is/are allowed.					
6)□	Claim(s) is/are rejected.					
7)	7) Claim(s) is/are objected to.					
8)⊠	Claim(s) 1-57 are subject to restriction and/or	election require	ment.			
Application	on Papers					
9)[] 7	The specification is objected to by the Examine	er.				
10)∏ 7	he drawing(s) filed on is/are: a)☐ accep	pted or b)☐ obje	cted to by the Exa	miner.		
	Applicant may not request that any objection to the	e drawing(s) be h	eld in abeyance. S	ee 37 CFR 1.85(a).		
11)[] 7	he proposed drawing correction filed on	_ is: a)∏ appro	/ed b)	oved by the Examin	er.	
	If approved, corrected drawings are required in rep	-	ection.			
, —	The oath or declaration is objected to by the Ex	aminer.				
•	nder 35 U.S.C. §§ 119 and 120					
•	Acknowledgment is made of a claim for foreigr	n priority under	35 U.S.C. § 119(a)-(d) or (f).		
	☐ All b)☐ Some * c)☐ None of:	•				
	1. Certified copies of the priority document					
	Certified copies of the priority documents					
	 Copies of the certified copies of the prior application from the International Bute the attached detailed Office action for a list 	reau (PCT Rule	17.2(a)).		Stage	
14)∐ A	cknowledgment is made of a claim for domesti	ic priority under	35 U.S.C. § 119(e	e) (to a provisiona	l application).	
	☐ The translation of the foreign language procedures the commentation of the foreign language procedures the comment is made of a claim for domestic the comment is made of a claim for domestic the comment is made of a claim for domestic the comments in					
Attachment	•	, , ,	50			
2) 🔲 Notice	e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-948) nation Disclosure Statement(s) (PTO-1449) Paper No(s)	5) [/ (PTO-413) Paper No Patent Application (PT		

Art Unit: 1642

DETAILED ACTION

Claims 1-57 are pending in the application and are currently under prosecution.

Please Note: In an effort to enhance communication with our customers and reduce processing time, Group 1640 is running a Fax Response Pilot for Written Restriction Requirements. A dedicated Fax machine is in place to receive your responses. The Fax number is 703-308-4315. A Fax cover sheet is attached to this Office Action for your convenience. We encourage your participation in this Pilot program. If you have any questions or suggestions please contact Anthony Caputa, Ph.D., Supervisory Patent Examiner at 703-308-3995. Thank you in advance for allowing us to enhance our customer service. Please limit the use of this dedicated Fax number to responses to Written Restrictions.

Election/Restrictions

Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 1-9, 20-21 drawn to isolated nucleic acids, vectors, and host cells classified in class 536, subclass 23.1; class 435, subclass 320.1, 325.
- II. Claims 10-14, drawn to an isolated tumor suppressor polypeptide, p33ING2, classified in class 530, subclass 350.
- III. Claims 15-16, drawn to an antibody that binds to an amino acid sequence of SEQ ID NO:1, but does not bind to an amino acid sequence of SEQ ID NO:8, classified in class 530, subclass 387.1.
- IV. Claims 17-18, drawn to an antibody that binds to an amino acid sequence of SEQID NO:8, but not to SEQ ID NO:1 classified in class 530, subclass 387.1.

Art Unit: 1642

- V. Claim 19, drawn to an antibody that binds to an amino acid sequence of SEQ ID
 NO:5, but does not bind to SEQ ID NO:8 classified in class 530, subclass 387.1.
- VI. Claims 22-29, drawn to a method for identifying a compound that modulates a tumor suppressor polypeptide, p33ING2, classified in class 435, subclass 4.
- VII. Claims 30-38, drawn to a method of inhibiting cellular proliferation comprising transducing a cell, classified in class 435, subclass 4, 69.1.
- VIII. Claims 39-49, drawn to a method for detecting the presence or absence of p33ING2 in mammalian tissue comprising detecting the level of p33ING2-specific reagents, classified in class 435, subclass 6, 7.1.
- IX. Claims 50-52, drawn to a method for determining a test amount of p33ING2 in mammalian tissue, classified in class 435, subclass 4, 6, 7.1.
- X. Claims 53-54, drawn to a method of detecting the presence or absence ofp33ING1 in mammalian tissue, classified in class 435, subclass 7.1.
- XI. Claims 55-57, drawn to a method of determining a test amount of p33ING1 in mammalian tissue, classified in class 435, subclass 7.1.

The inventions are distinct, each from the other because of the following reasons:

The Inventions of Groups I-V represent separate and distinct products which are made by materially different methods, and are used in materially different methods which have different modes of operation, different functions and different effects.

Art Unit: 1642

The inventions of Groups VI-XI are materially distinct methods which differ at least in objectives, method steps, reagents and/or dosages and/or schedules used, response variables, and criteria for success.

The invention of Group I and the methods of Groups VI-VII are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (I) the process for using the product as claimed can be practiced with another materially different product or (ii) the product as claimed can be used in a materially different process of using that product [see MPEP § 806.05(h)]. In the instant case the nucleic acid product as claimed can be used in a materially different process such as affinity chromatography.

The invention of Group III and the methods of Groups VI-VIII are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (I) the process for using the product as claimed can be practiced with another materially different product or (ii) the product as claimed can be used in a materially different process of using that product [see MPEP § 806.05(h)]. In the instant case the antibody product as claimed can be used in a materially different process such as affinity chromatography.

The invention of Group V and the method of Groups VIII are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (I) the process for using the product as claimed can be practiced with another materially different product or (ii) the product as claimed can be used in a materially different process of using that product [see MPEP § 806.05(h)]. In the instant case the antibody product as claimed can be used in a materially different process such as affinity chromatography.

Art Unit: 1642

The invention of Group IV and the methods of Groups VI-XI are not at all related because the antibodies of Group IV are not used in any of the methods of Groups VI-XI.

The invention of Group II and the methods of Groups VI-XI are not at all related because the proteins of Group II are not used in any of the methods of Groups VI-XI.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper. Furthermore, because these inventions are distinct for the reasons given above and the search required for one group is not required for another group, restriction for examination purposes as indicated is proper.

SPECIES ELECTION

Group VI (Claims 28 and 29) is generic to a plurality of disclosed patentably distinct species comprising the following:

- a) a cell which is a HCT116 human colon cancer cell line
- b) a cell which has the missense p33ING2 sequence of a polypeptide comprising SEQ ID NO:6

Group VII (Claims 36-38) is generic to a plurality of disclosed patentably distinct species comprising the following:

- a) a cell which is a HCT116 human colon cancer cell line
- b) a cell which has a missense endogenous p33ING2 phenotype
- c) a cell which has a null endogenous p33ING2 phenotype

Application/Control Number: 09/513,365 Page 6

Art Unit: 1642

d) a cell which has the missense p33ING2 sequence of a polypeptide comprising SEQ ID NO:6

The above species represent separate and distinct cellular genotypes and phenotypes with different functions such that one species could not be interchanged with the other. As such, each species would require different searches and the consideration of different patentability issues.

Group VIII (Claim 40) AND Group IX (Claim 52) are generic to a plurality of disclosed patentably distinct species comprising the following:

a) a p33ING2-specific antibody

b) a p33ING2-specific primer

c) a p33ING2-specific nucleic acid probe

The above species represent separate and distinct molecules with different structures and functions such that one species could not be interchanged with the other. As such, each species would require different searches and the consideration of different patentability issues.

Group VIII (Claim 41) is further generic to a plurality of disclosed patentably distinct species comprising the following nucleotide sequences:

a) SEQ ID NO:7

b) SEQ ID NO:2

c) SEQ ID NO: 10

Art Unit: 1642

Group VIII (Claims 48-49) is further generic to a plurality of disclosed patentably distinct species comprising the following antibodies:

a) an antibody that binds to an amino acid sequence of SEQ ID NO:1, but does not bind to an amino acid sequence of SEQ ID NO:8

b) an antibody that binds to an amino acid sequence of SEQ ID NO:5, but does not bind to SEQ ID NO:8

The products of the above species represent separate and distinct molecules with different structures and functions such that one species could not be interchanged with the other. As such, each species would require different searches and the consideration of different patentability issues.

Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable.

Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after

Art Unit: 1642

the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a petition under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gary B. Nickol Ph.D. whose telephone number is 703-305-7143. The examiner can normally be reached on M-F, 8:30-5:00 P.M..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anthony Caputa can be reached on 703-308-3995. The fax phone numbers for the organization where this application or proceeding is assigned are 703-305-3014 for regular communications and 703-308-4242 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0196.

Art Unit: 1642

Gary B. Nickol, Ph.D. Examiner Art Unit 1642

GBN September 5, 2001

SUSANTINGAR, PH.D. PRIMARY EXAMINER



RESTRICTION ELECTION FACSIMILE TRANSMISSION

DATE:
FROM/ATTORNEY:
FIRM:
PAGES, INCLUDING COVERSHEET:
PHONE NUMBER:
TO EXAMINER:
ART UNIT:
SERIAL NUMBER:
FAX/TELECOPIER NUMBER: (703) 308-4315
PLEASE NOTE: THIS FACSIMILE NUMBER IS TO BE USED ONLY FOR RESPONSES TO RESTRICTIONS.
COMMENTS:
THE SERVEN BY BASE CONTACT THE ATTORNEY AT THE

IF YOU HAVE NOT RECEIVED ALL THE PAGES OF THIS TRANSMISSION, PLEASE CONTACT THE ATTORNEY AT THE TELEPHONE NUMBER LISTED ABOVE.

IN COMPLIANCE WITH 10% OG 30, THE FILING DATE ACCORDED EACH OFFICIAL FAX TRANSMISSION WILL BE DETERMINED BY THE FAX MACHINE DATE STAMP FOUND ON THE LAST PAGE OF THE TRANSMISSION, UNLESS THAT DATE IS A SATURDAY, SUNDAY, OR FEDERAL HOLIDAY WITHIN THE DISTRICT OF COLUMBIA, IN WHICH CASE THE OFFICIAL DATE OF RECEIPT WILL BE THE NEXT BUSINESS DAY.

THE DOCUMENT(S) ACCOMPANYING THIS FACSIMILE TRANSMISSION CONTAIN(S) INFORMATION FROM THE UNITED STATES PATENT AND TRADEMARK OFFICE WHICH IS CONFIDENTIAL AND/OR LEGALLY PRIVILEGED. THIS INFORMATION IS FOR THE USE OF THE INDIVIDUAL OR FIRM NAMED ON THIS SHEET. IF YOU ARE NOT THE INTENDED RECIPIENT, YOU ARE HEREBY NOTIFIED THAT ANY DISCLOSURE, COPYING, DISTRIBUTION, OR THE TAKING OF ANY ACTION IN RELIANCE ON THE CONTENTS OF THIS INFORMATION IS STRICTLY PROHIBITED. THE DOCUMENTS SHOULD BE RETURNED TO THE PATENT AND TRADEMARK OFFICE IMMEDIATELY. IF THIS FACSIMILE IS RECEIVED IN ERROR, PLEASE NOTIFY THE ATTORNEY LISTED HEREON IMMEDIATELY.